



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,153	08/26/2003	Timothy J. Collins	CML01464M	7078
22917	7590	12/05/2008		
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			EXAMINER AGWUMEZIE, CHARLES C	
			ART UNIT 3685	PAPER NUMBER
			NOTIFICATION DATE 12/05/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/650,153	<b>Applicant(s)</b> COLLINS ET AL.	
	<b>Examiner</b> CHARLES C. AGWUMEZIE	<b>Art Unit</b> 3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5-11 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-11, and 19-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/10/06; 10/8/08</u> .                                       | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 8, 2008 has been entered.

### **Acknowledgements**

2. Applicants' amendment filed on July 22, 2008 is acknowledged. Accordingly claims 1, 5-11 and 15-20 remain pending.

### ***Election/Restrictions***

3. Claims 15-16 and 17-18, are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group II there being no allowable generic or linking claim. Election was made **without** traverse in a telephone discussion/election with James A. Lamb, Agent of Record Reg. No. 38,529 on December 1, 2008.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 5-11 and 19-20**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Halperin et al U.S. Patent No. 6,226,619 in view of Coppersmith et al (hereinafter "Coppersmith") U.S. Patent No. 6,069,955

6. As per **claims 1, and 10**, Halperin et al discloses a method for determining if an item is a fraudulent item, the method comprising the steps of:

obtaining by radio means a first number (small tag 2, figs. 1 and 2) associated with the item or item's packaging (fig. 1; col. 5, lines 55-65, which discloses "... number read from the tag ...");

determining a second number that is a public-key signature printed on the item or item's packaging (fig.1; col. 5, line 55-col. 6, line 5, which discloses "serial number on the label"; a bar code label also may be provided with encrypted information relating to the bottle's (e.g., the item's) content, and masked so that the customer can only access it after buying the product, and then recheck the originality of the product using a personal computer in the case of public encryption);

utilizing a public-key cryptographic process and the first number to cryptographically verify the second number; (col. 3, lines 5-15, which discloses and

determining the product's authenticity based on the verification (col. 2, lines 50-55, which discloses that “the item includes indicia ... for comparism with a secret ... designating authenticity”; col. 3, lines 5-15, which discloses that the customer can participate by verifying that different items on shelves have different serial numbers; col. 5, lines 50-65).

7. What Halperin does not explicitly disclose is:

utilizing a public-key cryptographic process and the first number to cryptographically verify the second number. Halperin however discloses that that “the customer also can check that the serial number and the coded number in the tag are compatible using some public-key” and “ ...verifying ... the number read from the tag with a number on the serial number on the label....”

8. Coppersmith discloses:

utilizing a public-key cryptographic process and the first number to cryptographically verify the second number (see figs. 1 and 2, which discloses coded and encrypted serial numbers labels which are attached to the item; see claim 1, which discloses that a second label associated with the product hidden from view containing a second encrypted version of said serial number using a second private key of a second private/public key pair ...verifying a match to the said serial number..; col. 3, lines 30-60; col. 4, lines 1-35)

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Halperin and incorporate a method comprising utilizing a public-key cryptographic process and the first number to

cryptographically verify the second number in view of the teachings of Coppersmith since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

**9.** As per **claim 5**, Halperin et al further discloses the method wherein the step of determining the products authenticity comprises the step of associating the product with an authentic product if the signature is verified, otherwise associating the product with a forged product (fig. 1; col. 2, lines 50-55, which discloses that “the item includes indicia ... for comparism with a secret ... designating authenticity”; col. 4, lines 30-40, which discloses that “the customer verify ... that the encrypted number carried by the tag corresponds to the unique serial number “, col. 7, lines 10-15, which discloses that “a unique signature is provided by the tag”; col. 7, line 65-col. 8, line 10).

**10.** As per **claim 6**, Halperin et al further discloses a method of manufacturing a product in order to prevent forgery, the method comprising the steps of:

obtaining by radio means an RFID tag (small tag 2, figs. 1 and 2) comprising a first number (fig. 1; col. 5, lines 55-65, which discloses “... number read from the tag ...”);

determining a second number utilizing the first number and a cryptographic process, wherein cryptographic verification of the second number insures the product's authenticity;

affixing the first number (small tag 2 affixed to bottle, fig. 1) to either the product or the packaging associated with the product (fig. 1; col. 2, lines 45-55; col. 5, which discloses a tag 72 for being affixed to a high value item"); and

affixing the second number (label serial number 3, fig. 1) to either the product or the packaging associated with the product (fig. 1; label serial number affixed to the bottle).

**11.** What Halperin does not explicitly disclose is:

determining a second number utilizing the first number and a cryptographic process, wherein cryptographic verification of the second number insures the product's authenticity

**12.** Coppersmith discloses:

determining a second number utilizing the first number and a cryptographic process, wherein cryptographic verification of the second number insures the product's authenticity (see figs. 1 and 2, which discloses coded and encrypted serial numbers labels which are attached to the item; see claim 1, which discloses that a second label associated with the product hidden from view containing a second encrypted version of said serial number using a second private key of a second private/public key pair ...verifying a match to the said serial number.; col. 3, lines 30-60; col. 4, lines 1-35)

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Halperin and incorporate a method comprising determining a second number utilizing the first number and a cryptographic process, wherein cryptographic verification of the second number insures the product's authenticity in view of the teachings of Coppersmith since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

**13.** As per **claim 7**, Halperin et al further discloses the method wherein the step of obtaining the tag comprising the first number comprises the step of obtaining an RFID tag comprising a unique, or semi-unique unalterable number (fig. 1; col. 4, lines 5-15, which discloses that "a tag is used that is preferably unique...that cannot be duplicated").

**14.** As per **claim 8**, Halperin et al failed to explicitly disclose the method wherein the step of affixing the second number to either the product or the packaging associated with the product comprises the step of printing a cryptographic signature on the product or the product's packaging

Coppersmith discloses the method wherein the step of affixing the second number to either the product or the packaging associated with the product comprises the step of printing a cryptographic signature on the product or the product's packaging



(see figs. 1 and 2, which discloses coded and encrypted serial numbers labels which are attached to the item; see claim 1, which discloses that a second label associated with the product hidden from view containing a second encrypted version of said serial number using a second private key of a second private/public key pair ...verifying a match to the said serial number..; col. 3, lines 30-60; col. 4, lines 1-35)

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Halperin and incorporate a method wherein the step of affixing the second number to either the product or the packaging associated with the product comprises the step of printing a cryptographic signature on the product or the product's packaging in view of the teachings of Coppersmith since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

**15.** As per **claim 9**, Halperin et al failed to explicitly disclose the method wherein the step of determining the second number utilizing the first number and a cryptographic process comprises the step of utilizing the first number and a private key to generate the second number

Coppersmith discloses the method wherein the step of determining the second number utilizing the first number and a cryptographic process comprises the step of utilizing the first number and a private key to generate the second number (see figs. 1

and 2, which discloses coded and encrypted serial numbers labels which are attached to the item; see claim 1, which discloses that a second label associated with the product hidden from view containing a second encrypted version of said serial number using a second private key of a second private/public key pair ...verifying a match to the said serial number..; col. 3, lines 30-60; col. 4, lines 1-35)

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Halperin and incorporate a method wherein the step of determining the second number utilizing the first number and a cryptographic process comprises the step of utilizing the first number and a private key to generate the second number in view of the teachings of Coppersmith since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

**16.** As per **claim 11**, Halperin et al discloses a method comprising the steps of:

obtaining by a radio means an RFID tag (small tag 2, figs. 1 and 2) comprising a first number (col. 5, lines 55-65, which discloses "... number read from the tag ...");

utilizing a private key and the first number to create a second number that is a cryptographic signature, such that cryptographic verification of the second number insures a product's authenticity; and

affixing the second number (serial number label 3, fig. 1) and the RFID tag (small tag 2, fig. 1) to the item or the item's packaging (see fig. 1; col. 2, lines 45-55; col. 5, which discloses a tag 72 for being affixed to a high value item”).

**17.** What Halperin does not explicitly disclose is:

utilizing a private key and the first number to create a second number that is a cryptographic signature, such that cryptographic verification of the second number insures a product's authenticity

**18.** Coppersmith discloses

utilizing a private key and the first number to create a second number that is a cryptographic signature, such that cryptographic verification of the second number insures a product's authenticity (see figs. 1 and 2, which discloses coded and encrypted serial numbers labels which are attached to the item; see claim 1, which discloses that a second label associated with the product hidden from view containing a second encrypted version of said serial number using a second private key of a second private/public key pair ...verifying a match to the said serial number..; col. 3, lines 30-60; col. 4, lines 1-35)

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Halperin and incorporate a method utilizing a private key and the first number to create a second number that is a cryptographic signature, such that cryptographic verification of the second number insures a product's authenticity in view of the teachings of Coppersmith since the claimed invention is merely a combination of old and known elements and in the

combination each element would have performed the same function as it separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

**19.** As per claims 19 and 20, Halperin further discloses the method wherein a bar-code is used for rendering the second number that is printed on the item or item's packaging (col. 5, line 65-col. 6, line5, which discloses verifiable by scanning ...of course a barcode label may be provided with encrypted information)

### **Conclusion**

**20. Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Agwumezie whose number is **(571) 272-6838**. The examiner can normally be reached on Monday – Friday 8:00 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on **(571) 272 – 6709**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charlie C Agwumezie/  
Primary Examiner, Art Unit 3685  
December 1, 2008